UNITED STATES DEPARTMENT OF AGRICULTURE

MISCELLANEOUS PUBLICATION No. 193

WASHINGTON, D.C. ▽ APRIL, 1934

PRESENT GUIDES FOR HOUSEHOLD BUYING

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INTRODUCTION

For some years Government and private agencies (*31*)[1] have been developing buying guides of various kinds. An attempt is made here to describe those which are of special interest to the ultimate consumer—that person who is buying things on the retail market for his own or his family's use.

A few of these guides have taken the form of quality grading systems. Scores are used in grading some commodities, with 100 the highest rating. For others, detailed descriptions have been written of the desired qualities of the product as a whole or of the most important grades. These descriptions are sometimes called specifications. They usually set up measures or standards of quality. In some cases, standards relate only to dimensions or size; in others,

[1] Italic numbers in parentheses refer to Literature Cited, p. 25.

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to the quality or the service the commodity will give. This does not mean that the product is standardized in the sense of being reduced to one size or to one quality.

The grade may be shown by a number, letter, or name on the label. However, there are many commodities for which grading systems have not yet been established; others are of a nature that makes grading impracticable. In some cases, such products are labeled with facts concerning their quality or construction, or the performance they will give in use. This may be only a word or two or it may be a detailed description. The practice of giving truthful and definite information on labels either by grade symbols or by statements is called "informative labeling."

Some agencies that have established specifications or grades do not label the products. They may publish specifications, leaving it to the purchaser to determine whether an article meets the specifications or they may award "approval" symbols to be used in advertising or on labels.

The guides discussed in this publication are chiefly those established by Federal and National agencies. No effort has been made to include all of the many State regulations and grading systems which apply only to products sold within the State concerned, although in a few instances State grades have been mentioned.

EXISTING TYPES OF CONSUMER GUIDES

UNITED STATES DEPARTMENT OF AGRICULTURE STANDARDS AND GRADES

Subdivisions within the United States Department of Agriculture have established standards and grades for some agricultural products such as foods and textile fibers.

The Food and Drug Administration has set up food standards and definitions (*76*) for the guidance of food manufacturers and officials enforcing Federal pure-food laws. These standards and definitions are based on consumer understanding and good trade practice. Such standards are merely advisory, but if adopted by food industries, they benefit consumers by keeping low-grade products off the market. They also help by making definite distinctions between products which might otherwise be confused. For example, mayonnaise dressing is distinguished from other salad dressing by the fact that the mayonnaise must contain "not less than 50 percent of edible vegetable oil." Egg noodles are distinguished from plain noodles which are made with water. Several kinds of flours, breads, cocoa, and many other foods are so defined that much help is given to the informed consumer by the terms which are allowed on the labels. These advisory standards set up by the Food and Drug Administration have been adopted as mandatory standards in some States.

The Bureau of Agricultural Economics has also been active in establishing standards. These are of several types—"mandatory", "permissive", and "tentative."[2] A mandatory standard is one which *must* be used in accordance with the conditions specified by the law under which the standard is promulgated. For example, under

[2] UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS. CHECK LIST OF STANDARDS FOR FARM PRODUCTS FORMULATED BY THE BUREAU OF AGRICULTURAL ECONOMICS. 8 pp. July 1932. [Mimeographed.]

the United States Standard Container Acts of 1916 and 1928, standards are set for the capacity of Climax baskets, berry boxes, hampers, and other containers commonly used for fruits and vegetables. A permissive standard is one which has been worked out and officially recommended for optional use. Permissive standards have been drawn up for meats, poultry, eggs, butter, cheese, some canned foods, and many fresh fruits and vegetables. A tentative standard is one that is still subject to investigation by the Department of Agriculture, but is offered for commercial use to test its practicability, or as a basis for discussion. Such a tentative standard may later become either a permissive or a mandatory standard, according to circumstances. As is true of all standards, these Department of Agriculture standards may be revised from time to time as conditions change.

FEDERAL SPECIFICATIONS

It is sometimes suggested that consumers might well use, as a basis for their buying, the Federal specifications set up by the Federal Specifications Board (*114*). However, Government specifications are not always adaptable for use in personal or household buying. They are minimum specifications for articles needed for particular uses in Government organizations, and are not necessarily suitable for any other purpose. W. D. Appel, Chief of the Textile Section of the Bureau of Standards, makes this clear in the following statement:

> It should be emphasized that these are specifications for materials to meet very definite requirements of the Government. They are not designed for general use, though organizations that have similar needs frequently do use them. I mention this because a good many people write in and think that the Federal specifications are for the best material or for material that it is compulsory for people to buy or something of that sort (*25, p. 788*).

Some publications, issued by the Government for the use of Government purchasing offices, are of value to consumers as general guides. A good example is the technologic paper of the Bureau of Standards relating to the use of Government specification paints and paint materials (*118*).

The United States Bureau of Standards compiles a list of manufacturers who guarantee that their products are equal to, or better than, those described by the Federal Specifications Board.[3] These are spoken of as "willing-to-certify" manufacturers. Some of the items included are used for household purposes, such as brushes, fire extinguishers, and tableware (*45*).

FEDERAL TRADE COMMISSION ACTIVITIES

The Federal Trade Commission Act of 1914 declares unfair methods of competition in commerce to be unlawful and authorizes the Commission to issue "cease and desist" orders against any person or firm practicing such methods. In cases of noncompliance, the Commission may petition the Federal courts for enforcement. Under this authority, much has been done to correct abuses in retail selling injurious to consumers. Practices which have been condemned by the Commission include: Use of false or misleading advertising; misbranding of fabrics and other commodities; making false or disparag-

[3] United States Department of Commerce, Bureau of Standards. sources of supply of commodities covered by federal specifications. U.S. Dept. Com., Bur. Standards Sup. to Letter Circ. LC 256a, 123 pp. March 1, 1932. [Mimeographed.]

ing statements respecting competitors' products; selling rebuilt, second-hand, or old products as and for new; passing off goods or articles for well and favorably known products of competitors; use of misleading trade names; imitating or using standard containers for less than standard weight; giving products misleading names (*115*).

However, the United States Supreme Court [4] recently held that a practice does not come under the jurisdiction of the Commission unless it can be shown that it injures or tends to injure the business of competitors. In this case the Court admitted that the consumer's welfare was at stake but ruled against the Commission because it had not proved that the practice was affecting competitive business.

The Federal Trade Commission also sponsors trade practice conferences in the various industries to consider matters which come under the jurisdiction of the Commission and to encourage the establishment of rules of fair trade practice by the industry itself. Often these conferences adopt definitions of terms which later are used by the Commission as the basis of enforcing truthful labeling and advertising. During the fiscal year ended June 30, 1932, the Commission approved and accepted trade practice conference rules for 10 industries; namely, furnace pipe and fittings, electric contracting, electric wholesalers, feathers and down, waste-paper dealers, household furniture, metal burial vaults, multicolor printers of transparent and translucent materials, school-supply distributors, and silk weighting. Rules previously promulgated were revised for the following industries: Commercial cold storage; grocery; plumbing and heating; scrap iron and steel; trunks, luggage, and brief cases; warm-air furnaces; and direct-selling industry (*115*). Some of these rules and definitions are discussed in the following pages in connection with particular commodities.

COMMERCIAL STANDARDS

The United States Bureau of Standards, through its Trade Standards Division, helps those industries wishing voluntarily to establish standards for their products (*93*). The Bureau acts as referee to make sure that the interest of distributors and consumers, as well as producers, are given consideration and publishes the standard as a so-called "Commercial Standard" when it has been accepted by adequate representation of the three groups, and in the absence of "active" opposition. These standards refer to grades, quality, and sizes of the product. Labels stating that an article conforms to the standard are not required but may be attached by the manufacturer. The Bureau publishes lists of manufacturers willing to comply with the standard, but the trade association of the industry is responsible for seeing that the manufacturers who sign the agreement live up to it. Many of the items for which Commercial Standards have been established are of an industrial nature and not of direct interest to the ultimate consumer; standards for some items which are purchased by consumers on the retail market are noted in the following pages.

AMERICAN STANDARDS

The American Standards Association (*24*), a federation of 39 national technical societies, trade associations, and Government bodies acts as a forum in which these organizations set up national standards

[4] *Federal Trade Commission* v. *Raladam Co.*, 283 U.S. 643–654.

(called American Standards) for commodities of interest to their members. Some of these, as for example those relating to gas-burning appliances, are of assistance to household purchasers (*4, 5, 6, 7, 8, 9, 10, 11, 12*). Through cooperative arrangements between the Bureau of Standards and the American Standards Association, some Commercial Standards established by the Bureau of Standards have also been made American Standards.

STANDARDS FOR ENGINEERING MATERIALS

The American Society for Testing Materials, a national technical society of professional engineers and others interested in the properties of materials, has 60 committees appointed to study the properties of various materials of engineering. These committees develop standard specifications, methods of testing, and definitions of terms. Many of these standards (*22*) are fundamental to specifications and standards used by other agencies. Some have been made American Standards. A few, for example the standard specifications for portland cement (*23*), are useful to the household purchaser.

The Society of Automotive Engineers publishes annually S.A.E. Standards and Recommended Practices that are specifications to promote the interchangeability of mechanical parts, to facilitate and reduce the cost of manufacture, operation, and servicing, to promote safety, establish uniform methods of testing, and to establish nomenclature and definitions of technical terms.

These relate primarily to parts and materials used in the construction, operation, and servicing of automotive vehicles and apparatus, such as gasoline and diesel engines, automobiles, airplanes, motorboats, and industrial machinery.

SIMPLIFIED PRACTICE RECOMMENDATIONS

Many industries have availed themselves of the assistance of the Division of Simplified Practice of the United States Bureau of Standards in eliminating unnecessary varieties in the sizes, dimensions, styles, and types of products on the market. This has resulted in simplified practice recommendations[5] published by the Bureau in which standards agreed upon by manufacturers, distributors, and users are described. These are a guide to consumers chiefly as regards recognized standard dimensions and sizes of manufactured products. For example, information on the mesh openings, wire size, and width and length of roll of wire insect screen cloth (*103*), stock sizes of paint and varnish brushes (*82*), and the styles and sizes of cut tacks and small cut nails (*83*) is of value to household purchasers. In some cases, as in the recommendation relating to clay tiles for floors and walls (*96*), grade nomenclature, grade marks, grade specifications, and certifications of grades are also included.

APPROVAL AND CERTIFICATION SERVICES

Some commercial and professional organizations have established "approval" or "certification" plans whereby articles which pass certain laboratory tests or meet specified requirements are approved or

[5] United States Department of Commerce, Bureau of Standards. List of simplified practice recommendations. U.S. Dept. Com., Bur. Standards Letter Circ. 345, 3 pp. Nov. 15, 1933. [Mimeographed.]

accepted by the organization. None of these services rank or grade the products they approve. However, when definite requirements are established as a minimum basis of approval and these and the methods of test are published so that the public may judge the sincerity of the service, these "approval" plans are a general guide to purchasers.

UNDERWRITERS' LABORATORIES

The National Board of Fire Underwriters supports the Underwriters' Laboratories (*48*) in Chicago for the examination and testing of devices, systems, and materials of interest to insurance companies. Lists of tested and approved appliances are published annually. After a product is approved, periodic inspections of the manufacturer's output insure the maintenance of quality. Goods found to conform to the requirements of the laboratory are labeled "Underwriters' Laboratories Inspected." The lists of inspected items include electrical, fire-protection, gas and oil, automotive, and burglary-protection appliances, as well as others which are inspected for accident hazard. Detailed descriptions of the tests made, of the approved appliances, and of the way each is labeled can be secured from these laboratories.

AMERICAN GAS ASSOCIATION

The American Gas Association owns and operates two gas-appliance testing laboratories. All appliances tested and approved by these are labeled with a symbol known as the "laboratory seal of approval." Permission to use this seal is granted to manufacturers for periods of 1 year only and must be renewed annually. The standards used as a basis for this approval are drawn up by a National committee supervising some 24 working subgroups, each concerned with a different type of gas appliance or accessory. This committee is also a sectional committee of the American Standards Association and includes representatives of trade associations, consumer organizations, Government departments, and technical societies. Both the standards and methods used in testing the appliances are published for general-consumer information (*3*, *13*). They deal with the construction and performance of the appliance, chiefly as these affect safety. An extensive system of inspection is maintained whereby every approved appliance is inspected at the factory of the manufacturer at least once each year to insure that articles of the same design and construction as the tested sample are being produced. This seal of approval is a guarantee of compliance with the association's standards of safety.

AMERICAN MEDICAL ASSOCIATION

The American Medical Association (*40*) maintains the Council on Pharmacy and Chemistry, which is essentially an advisory group to members of the medical profession in order that they may be informed concerning the status of medical products they are asked to prescribe. The council judges proprietary products in accordance with a set of rules it has formulated (*18*). Those which are found to comply with these rules are "accepted" (not "approved") for inclusion in a publication of the association entitled "New and Nonofficial Remedies" (*17*). Those which are not found acceptable and are still urged

on the medical profession by the manufacturers are the subject of reports which appear in the council columns of the Journal of the American Medical Association. The accepted products are permitted to use the seal of the Council on Pharmacy and Chemistry. The association maintains a laboratory to set up standards for new drugs and to determine whether or not the ones submitted to the council are of the composition claimed.

The work of the association's Council on Physical Therapy is similar to that of the Council on Pharmacy and Chemistry except that its field is that of physical therapy apparatus and physical therapy (*15, 19*). The bureau of investigation of the association advises the public concerning the status of patent medicines and publishes books exposing the fallacies of these products (*32*).

The American Medical Association also maintains a Committee on Foods (*39, 43*) for the purpose of discouraging false advertising claims in the selling of foods. Those meeting the requirements (*16, 20*) of the committee are listed and the "seal of acceptance" of the association may be used in merchandising them. The committee requires the manufacturer who wishes his product "accepted" to submit a statement concerning its composition. The association does not maintain a laboratory to check the composition of foods.

THE NEW ENGLAND COUNCIL

The New England Council, established in 1925 by the governors of the six New England States, authorizes the use of a New England quality label on certain locally produced food products when they are graded and packed to conform to official State grades. Except for the State name, the labels used are identical.

> The commissioner of agriculture establishes grades at the request of the growers of his State, calling them into meetings to aid him in determining what the requirements of any particular grade should be. To protect the reputation of the label, each State department of agriculture maintains an inspection service with trained field men whose duties are to examine graded and labeled products in the ordinary channels of trade to see that they meet the requirments. . . . The use of grades is not compulsory on the producer, but anyone desiring to use the New England label must grade his products properly, the right to use this label being taken away if his product falls below the requirements of the grade *(110, p. 220)*.

The New England quality label may be used on certain fruits and vegetables, butter, eggs, jelly, maple products, honey, turkeys, and some other products not directly used for food.

MISCELLANEOUS

One private organization of consumers (*54*) operating on a paid membership basis, issues to its members lists of brand-named articles, classed as A—Recommended, B—Intermediate, and C—Not Recommended. Relative price is designated by numbered symbols; for example, A–1 indicates a first-class article at a low price; B–3, an article ranked intermediate in quality at a high price.

Some publishing companies have arranged for "approval" labels or "seals of acceptance" to be used by their advertisers on products or in connection with advertising.

QUALITY GRADES NOW IN USE

FOOD PRODUCTS

Many of the goods ordinarily purchased for household use can be manufactured in such a way as to permit grade labeling. However, unavoidable variations in the plants and animals grown for food make the standardization of food products more difficult. Foods can, nevertheless, be sorted into several groups so that within each group a degree of uniformity prevails.

These grades usually were not developed with the consumer especially in mind, but a study of them by the customer can give valuable assistance, especially in the buying of original packages when marked as to grade. Certain of these items can now be purchased by grade in some retail markets. Consumers also are protected to a certain extent by the Food and Drugs Act of 1906 (*74*), which provides that foods entering into interstate commerce shall not be misbranded, adulterated, or unwholesome.

The following pages summarize briefly for different groups of foods what several agencies are doing to bring information on grades to the consumer. No attempt is made to include a complete compilation of individual State regulations regarding food grading or labeling. The illustrations given are merely examples of local attempts to aid the consumer. Anyone sufficiently interested can readily become acquainted with local food regulations by obtaining any official State grades from the State department of agriculture or marketing, and by making contact with local boards of health.

DAIRY PRODUCTS

BUTTER

The United States Department of Agriculture, under the provisions of the Farm Products Inspection Law (Agricultural Appropriation Act) maintains a service for the grading of butter (*73*). Butter is commercially classified as Dairy butter, which is made on a farm; Creamery butter, made in a creamery or factory; Packing-Stock butter; Ladled butter; Process or Renovated butter; and Grease butter.

In scoring the first three classes of butter, maximum ratings are given to various factors as follows: Flavor, 45; body, 25; color, 15; salt, 10; package, 5; total, 100. Butter scoring above 93 or 94 shall be fine, sweet, fresh, mild, and clean in flavor. Diminishing desirability is expressed by lowered scores. Any butter scoring below 75 is classified as Grease butter and as such is considered unfit for food.

Only butter officially scoring 92 or more may be accompanied by a dated "certificate of quality" issued by authority of the United States Department of Agriculture. Under proper methods of distribution, which include adequate refrigeration, this certified butter should reach the consumer in first-class condition within 2 weeks of the time of the grading. A number of firms take advantage of the United States Government grading service, and millions of pounds of this "certified" butter are sold in retail stores each year. Except for butter sold under United States certification of quality, the score of the butter sold in most retail outlets is not made easily available for the information of the consumer.

Regardless of the score given to the butter on the above scale of rating, any butter which contains less than 80 percent of butter fat is an adulterated product under the terms of the Food and Drugs Act, and is therefore illegal.

CHEESE

The United States Department of Agriculture maintains a grading service on cheese as a part of the farm products inspection service of the Bureau of Agricultural Economics (*42*). American cheese is classified for age or degree of flavor as fresh, mild, or aged. Texture is classed as close, medium close, and open. Color is classed as uncolored, medium colored, or high colored.

The final score is based upon a maximum rating of the various factors as follows: Flavor, 30; body and texture, 40; finish and appearance, 20; color, 10; total, 100.

To score from 95 to 100, cheese must have "an especially fine, clean flavor and aroma, very fully developed, and especially pleasing to the taste and smell." Poor or "off" flavors limit the score to 85 points or less.

Cheese that scores 95 or more is graded as U.S. Extra Fancy; 92 to 94 as U.S. Fancy; 89 to 91 as U.S. No. 1; 86 to 88 as U.S. No. 2; 83 to 85 as U.S. No. 3.

MILK AND CREAM

Methods of milk grading and the standards established for grades of milk differ in different localities. However, several States have adopted a milk ordinance and code which is approved by the United States Public Health Service and the Bureau of Dairy Industry of the United States Department of Agriculture.[6]

The grades defined by the milk ordinance are certified milk; grades A, B, C, and D raw milk; and grades A, B, and C pasteurized milk. Grade D raw milk and grade C pasteurized milk shall be plainly labeled "cooking milk."

Departments of health in most large cities have established rigid control systems for the inspection and grading of milk. In New York City "all milk sold must be grade marked and no milk may be sold under grading until the source of supply has been approved by the Board of Health." Other municipalities have similar rulings (*1*).

Dried skim milk (*2*), which at the present time is used largely by the baking, ice-cream, and candy industries, has been graded by the American Dry Milk Institute as Extra, Standard, and Third grade.

Several classes of cream are recognized. The United States Department of Agriculture defines "whipping" cream as cream which contains not less than 30 percent of milk fat. In New York State the designation "heavy" cream may be used only in the case of cream containing 36 percent or more of butter fat. "Medium" cream must contain 25 percent or more of butter fat and "light" cream must contain from 18 to 25 percent of butter fat.

EGGS

In some retail markets eggs are sold in sealed cartons bearing on the seal the date of grading and the inscription U.S. Specials or

[6] UNITED STATES PUBLIC HEALTH SERVICE. MILK ORDINANCE AND CODE. 81 pp. 1931. [Mimeographed.]

U.S. Extras. Either of the inscriptions on the dated seal indicates that, *on the date specified,* the eggs were examined by a Federal egg grader, who noted the size of the eggs, the condition of the shell, and by candling, the size of the air cell, and the condition of the yolk and white.[7] [8]

To be graded as first quality, or U.S. Special, eggs must have clean, sound shells and regular, localized air cells not more than one eighth of an inch in depth. The yolks must be well centered with outline indistinct, the whites must be firm and clear, and there must be no visible development of the germ. The requirements for the second-quality eggs, or U.S. Extra, which are usually the best quality available, are similar to those of the first, except that the air cell may be one fourth of an inch in depth and the yolk must be fairly well centered and its outline may be moderately defined. There are several lower grades for eggs, but only the two mentioned are retailed under a "certificate of quality." It is very important to note the date on the seal or certificate of quality, because under unfavorable holding conditions the quality of eggs may deteriorate rapidly after grading.

Besides being graded for quality, the eggs are graded for size. In either quality, one may obtain large eggs, having a minimum weight of 24 ounces per dozen; medium-sized eggs, weighing at least 20½ ounces per dozen; or small eggs, weighing 17 ounces per dozen.

Eggs bearing the Government certification of quality are sold in a number of the larger cities in the Pacific Coast States; in New York City, Baltimore, and Washington, D.C. Many States also have official grades for eggs.

FRUITS AND VEGETABLES

FRESH FRUITS AND VEGETABLES

The quality factors considered by the United States Department of Agriculture in establishing United States permissive standards for grading fresh fruits and vegetables include degree of ripeness, uniformity of size and shape, color, and freedom from injuries caused by mold, decay, freezing, cuts, bruises, worms, insects, and plant diseases. While the grade terms and the number of grades established for the different varieties of fruits and vegetables differ somewhat, in general U.S. Fancy is the best grade, and is applied only to the choicest specimens. U.S. No. 1 and U.S. No. 2 designate the next two grades. The Department of Agriculture has issued a buying guide for consumers (*44*) which gives many details to be considered in the selection of specified fruits and vegetables. Many States have adopted the United States grades; other States have established their own grades for fruits and vegetables.

Some fruits and vegetables (for example, berries and greens) are so perishable that their degree of desirability changes rapidly. For this reason it often is not feasible for the retailer to offer such products by grade, although the grades may be very useful in the wholesale market. Less perishable products such as potatoes, apples, and citrus fruits, are only occasionally available in retail markets under grade terminology, but are often so found in the wholesale markets for consumers who can buy in quantity.

[7] UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS. EGG STANDARDIZATION. Leaflet no. 2, 21 pp. 1929. [Mimeographed.]

[8] UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS. OFFICIAL UNITED STATES STANDARDS FOR INDIVIDUAL EGGS. 11 pp. February 1934. [Mimeographed.]

CANNED FRUITS AND VEGETABLES

The McNary-Mapes amendment (July 1930) to the Food and Drugs Act gives the Secretary of Agriculture power to establish a minimum standard of quality for each kind of canned food except meat and milk products. After the standard has been established, any canned vegetable entering into interstate commerce which does not measure up to the requirements must have conspicuously printed on the label the words "Below U.S. Standard. Low Quality but Not Illegal." Substandard fruits must be labeled "Below U.S. Standard. Good Food—Not High Grade." Products which carry the substandard labeling are wholesome food, even though they may not be up to the recognized standard in some other respects.

In certain special cases such as soaked dry peas and artificially colored peas some explanatory information must appear in addition to the conventional substandard legend. Slack-filled containers, including those carrying an excess of liquid packing medium, must be labeled "Slack Fill" and, when such is the case, "Contains Excess Added Liquid." This requirement applies even to food for which no quality standards have as yet been issued. To date (February 1934) minimum standards (*75*) have been established for canned peaches, pears, peas, tomatoes, apricots, and cherries.

Standardized grades have been developed for optional use by the Bureau of Agricultural Economics. Although substandard labeling is the only quality information required by Federal law, the Secretary of Agriculture, under the Farm Products Grading Law, has promulgated permissive grade standards for canned corn (both whole and cream style) (*67*, *68*), peas (*69*), snap beans (*70*), tomatoes (*71*), and canned grapefruit.[9] Tentative standards have been prepared for canned fruits and other canned vegetables. These standards bear the designations U.S. Grade A (Fancy), U.S. Grade B (Extra Standard or Choice), U.S. Grade C (Standard), and Off-Grade (Substandard). Some canners are voluntarily labeling their products with the grade designations, "Grade A", "Grade B", or "Grade C".

The words used within the parentheses to supplement the above A, B, C grading system are the terms which have long been recognized by the canning trade and by wholesale distributors as descriptive of quality. The Fancy grade products are carefully selected for uniformity of size, color, and appearance, and represent the most desirable portion of the crop for canning. Vegetables of this grade are harvested and canned at the period of their greatest succulence, and fruits at their most desirable period of ripeness. The Choice fruits and Extra Standard vegetables, i.e., Grade B, are next best; the Standard grade, i.e., Grade C, ranks third. These grades are uniform from year to year regardless of crop conditions. Fancy fruits are commonly packed in a heavier sirup than the Choice and Standard grades. Grades B and C are wholesome products and may be purchased without hesitation. They may frequently serve the housewife's purposes as well as the higher grade and should be sold at a cheaper price.

Practically every business transaction in the process of distributing canned foods (including warehousing and financing) is handled on the basis of grades recognized throughout the trade. But when the can

[9] Promulgated by the Secretary of Agriculture, Feb. 21, 1934.

appears on the grocery-store shelf the label seldom shows the grade for the information of the ultimate consumer.

DRIED FRUITS

Dried apples, apricots, peaches, and pears are commercially classified into five grades in which size and quantity are both considered, as Extra Fancy, Fancy, Extra Choice, Choice, and Standard. The Extra Fancy grade contains the largest, most uniform, and best fruits. Figs are graded as Fancy, Choice, and Standard. Stemmed Muscat raisins, both with seeds and seeded, have a size grading and are referred to as Four-, Three-, Two-, or One-Crown, the Four-Crown being the largest size. Size grades for seedless raisins are not so clearly defined. Cluster raisins are also graded, the largest being the Six-Crown or Imperial Clusters, the smallest the Three-Crown Layers (*33*). The smaller sizes are less expensive and can be used to equally good advantage for many purposes. Prunes are graded accord ng to the number required to make a pound, and are referred to as 20–30's, 30–40's, and so forth, down to the very small 110–120's.

DRIED BEANS

The Department of Agriculture has drawn up standards for the commercial grading of dried beans (*65*). Twenty-one classes of dried beans have been defined. Within each class are four grades. For all except limas and baby limas, these grades are U.S. No. 1, U.S. No. 2, U.S. No. 3, and U.S. Sample grade. For limas and baby limas, they are U.S. Extra No. 1, U.S. No .1, U.S. No. 2, and Sample grade.

In general, the requirements for the best, or U.S. No. 1, grade are that the beans shall be well screened and of good natural color. The "maximum limits of splits, damage, other beans, and foreign material" for this grade varies from 1.5 to 4.5 percent according to the variety of bean.

Soybeans are divided into five classes (*63*) yellow, green, brown, black, and mixed. Each class may be graded as U.S. Extra No. 1, U.S. No. 1, U.S. No. 2, U.S. No. 3, U.S. No. 4, and U.S. Sample grade.

MEATS, POULTRY, AND FISH

Meats intended for interstate or foreign commerce are inspected by the Bureau of Animal Industry of the United States Department of Agriculture. Inspection includes veterinary examination of carcasses and organs at time of slaughter, together with rigid sanitary requirements. Fresh meats that pass inspection receive a circular purple stamp "U.S. Insp'd & P's'd." Cured, canned, and packaged products containing meats prepared under Federal inspection likewise are appropriately labeled to show that the meat came from healthy animals. A few States and numerous cities conduct inspection of meats within their jurisdiction, supplementary to the Federal meat-inspection service.

BEEF, VEAL, AND LAMB

In addition to this required inspection, meats may be classified and graded for quality according to a system worked out by the Bureau of Agricultural Economics. Most of the meat is graded while in carcass form, and the points considered are conformation, finish, and quality.

When wholesale cuts are graded, consideration may also be given to color, texture, grain, marbling, and the relative proportions of flesh, fat, and bone (*38*). Under this system beef is divided into five classes: Steer, heifer, cow, bull, and stag. Each class is subdivided into grades as follows: Prime, or No. A 1; Choice, or No. 1; Good, or No. 2; Medium, or No. 3; Common, or No. 4; Cutter, or No. 5; and Low Cutter, or No. 6. The standards for a Prime piece of beef are so very high that only a small percentage of carcasses can be stamped as of that grade. Most beef falls into the Medium grade. About one fifth is of the Common grade. Lamb, mutton (*35*), veal, and calf (*36*) carcasses are graded as Prime, or No. A 1; Choice, or No. 1; Good, or No. 2; Medium, or No. 3; Common, or No. 4; and Cull, or No. 5.

After being graded, the meats are stamped (*34*) by or under the immediate supervision of a Federal official. The imprint, which shows the class and the grade of the meat, is applied to the carcass by a roller in such a way that the information appears on all the major retail cuts. This stamp, at a little distance, appears like a purple band across the meat. Beef and lamb stamped with the Government grade are not yet available in all markets, although they may be obtained in a number of large cities.

As it is extremely difficult for the average person to judge meat qualities accurately from appearance, this grading of meat by an expert should be very helpful to the consumer. The quality of any given grade is uniform throughout the country and does not change from season to season. The grade stamp of quality on each meat cut prevents substitution of a quality inferior to the one ordered.

PORK

Tentative grade descriptions for pork carcasses and cuts have been prepared (*37*), and these grades are being used in specifications by many Federal, State, and city institutions, with satisfactory results. The carcasses are classed as barrows, gilts, sows, stags, and boars. They are also divided according to their suitability and desirability for special uses as: Fat type (butcher), meat type (bacon), sow (packing), shipper, roasting, and stag-pork carcasses. The carcasses are then graded as No. 1, No. 2, No. 3, and Cull.

RABBITS

Tentative United States standards for classes and grades for dressed domestic rabbits [10] classify them as young (which includes broilers, fryers, and roasters) and old. The three grades within each class are: U.S. Prime, U.S. Choice, and U.S. Commercial.

POULTRY

The Bureau of Agricultural Economics has drawn up tentative U.S. Standards for dressed turkeys,[11] and for chickens and fowls.

Turkeys are first classified by age and sex. Birds less than 1 year old, having soft meat and a flexible breastbone are classed as young hens or young toms. Old hens and old toms are mature birds, with

[10] UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS. TENTATIVE U.S. STANDARDS FOR CLASSES AND GRADES FOR DRESSED DOMESTIC RABBITS. 4 pp. 1932. [Mimeographed].

[11] UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS. TENTATIVE U.S. STANDARDS AND GRADES FOR DRESSED TURKEYS. 8 pp. 1933. Mimeographed.]

toughened flesh and hardened breastbone. Within each classification are four grades as follows: U.S. Special, U.S. Prime, U.S. Choice, and U.S. Commercial.

In some markets turkeys are individually tagged with the United States grades; in other places, although the birds may have been commercially graded, they are not tagged for the retail trade.

Chickens and fowls are first classified by age. The young birds are further classified as broilers, fryers, roasters, stags, and capons. Old birds, which may be any age or weight, are classed as cocks or fowls. These older birds are often advertised as "stewing chickens."

Within each class the four grades bear the same terms as the four turkey grades. Chickens rarely are found in the retail markets individually tagged, although they are often shipped in boxes stamped with the United States grade names.

FISH

With the cooperation of the Bureau of Fisheries, United States Department of Commerce, grades for fish based on quality and size have been established by the Virginia Commissioner of Fisheries and Division of Markets. The grades "apply to fresh fish and certain packed and dried fish" (*77*). North Carolina, Maryland, and Massachusetts are also studying the problem of fish grading.

MISCELLANEOUS

HONEY

After being certified by a Federal inspector, extracted honey may be sold under the grades of United States Fancy and United States No. 1. Comb-section honey may also be graded as United States No. 2 (*72*). The color of the honey is mentioned on the grade stamp.

PICKLES AND OLIVES

The National Pickle Packer's Association (*28*) has established standards for pickles based on shape, curing, color, and size. The terms used for the size grading are "midgets", "gherkins", "smalls", "medium", and "large." Size variations are from 1½ to 4 or more inches in length.

According to a California law effective October 1, 1931, State inspection of ripe olives is required. Canned products falling below a minimum standard must be marked "seconds." All labels must also carry a cut showing the size of the fruit in the container and a statement of the approximate number of olives.

Green olives are graded for size according to the number per kilo (2.2 pounds). Queen olives run 60–70 per kilo for the largest and 200–220 per kilo for the very small. Manzanillo olives, which are used for stuffing, vary from 180–200 for the largest to 340–360 for the very small.

RICE

The rice most usually sold in retail stores is what is known as milled rice, or rice from which the hulls, germs, and bran layers have been removed. At least 11 varieties of milled rice are on the market. The Department of Agriculture has drawn up official standards (*62*) by which each variety may be graded as Extra Fancy (U.S. No. 1),

Fancy (U.S. No. 2), Extra Choice (U.S. No. 3), Choice (U.S. No. 4), or Medium (U.S. No. 5).

Brown rice is rice from which the hulls only have been removed. Practically the same varieties or classes are available for brown rice as for the milled. The brown rice may be graded according to United States Department of Agriculture official standards as Extra Fancy, Fancy, and Choice.

FOOD CONTAINERS

Attention has been given to the standardizing of can sizes. The sizes most frequently used for fruits and vegetables are shown in table 1. The most commonly used can size for fruits is no. 2½ and for vegetables, no. 2. Larger and smaller sizes are available to suit the needs of any group. The no. 5 and no. 10 sizes are used chiefly by institutions and are purchased wholesale, but may be ordered through retail stores.

TABLE 1.—*Commonly used sizes of standard cans for fruits and vegetables (59)*

Can size	Average net weight	Contents in cupfuls	Approximate number of servings
Buffet	8 ounces	1	2 (small).
No. 1	11 ounces	1⅓	2.
No. 1 tall	16 ounces	2	3–4.
No. 2	20 ounces	2½	4–5.
No. 2½	28 ounces	3½	5–7.
No. 3	33 ounces	4	6–8.
No. 5	3 pounds 8 ounces	7	10–14.
No. 10	6 pounds 10 ounces	13	20–26.

Several sizes of cans which are used less frequently than those specified in table 1 sometimes appear in the retail stores. These cans look much alike and may be distinguished one from another only by a close comparison of height, diameter, and net weight of contents. For example, can no. 300 is 4$\frac{7}{16}$ inches high and 3 inches in diameter. Can no. 303 is $\frac{1}{16}$ of an inch shorter but $\frac{3}{16}$ of an inch greater in diameter than no. 300, and its contents usually weigh from 1 to 2 ounces more. Unless care is taken either of these cans may be mistaken for the no. 2 can which is 4$\frac{9}{16}$ inches high and 3$\frac{7}{16}$ inches in diameter. However, the no. 2 can holds from 4½ to 5½ ounces more than the no. 300 can, and from 3 to 4 ounces more than the no. 303 can.

Simplified practice recommendations of the Bureau of Standards, United States Department of Commerce, have reduced the number of sizes of containers in common use for some foods. Stock glass containers for mayonnaise and kindred products (*101*) have been reduced to five sizes which will contain: 3 fluid ounces, ½ pint or 8 fluid ounces, 1 pint, 1 quart, and 1 gallon. Nine sizes of glass containers holding from 2 to 64 ounces are recommended for preserves; 7 sizes holding from 2 to 16 ounces are recommended for jelly; and 4 sizes holding 7 to 38 ounces for apple butter (*108*). Three sizes of glass containers with a capacity of 8, 12, and 16 fluid ounces are recommended for cottage cheese and sour cream (*107*). Other simplified practice recommendations deal with wooden butter tubs, 1-pound

folding boxes for coffee, salt packages, carbonated beverage bottles, ice-cream cups and cup caps, and ice-cream brick molds and cartons.

The Federal Standard-Barrel Law of 1915 (*78*) established standard capacity and dimensions for fruit and vegetable barrels and cranberry barrels. This law is enforced by the Bureau of Standards, United States Department of Commerce.

The United States Standard Container Act of 1916 (*60*) established standard sizes for Climax baskets, berry boxes, and till baskets for use in interstate commerce. The United States Standard Container Act of 1928 (*64*) is a weights and measures law and affects all transactions within a State as well as those in interstate commerce. Under this act 9 standard sizes have been established for hampers, round-stave baskets, and straight-side baskets; and 6 standard sizes for splint or market baskets. These acts are enforced by the Bureau of Agricultural Economics, United States Department of Agriculture.

An amendment to the Food and Drugs Act provides that all packaged foods shipped in interstate commerce shall be conspicuously marked on the outside of the package in terms of weight, measure, or count.

CLOTHING AND TEXTILES

CLOTHING

Almost no quality grades or standards relating to fabrics or clothing exist in the industry today. The labels used on ready-to-wear clothing give the consumer practically no information as to the composition or quality of the fabric or the quality of workmanship used in the construction of the garment.

GARMENT SIZES

A number of Commercial Standards relating to dimensions of ready-made clothing have been established under the auspices of the Bureau of Standards: Minimum measurements for boys' blouses, waists, shirts, and junior shirts (*95*); knit underwear (other than rayon) (*102*); and men's pajamas (*89*). The measurements agreed upon by the manufacturers and issued as these standards were based upon surveys made of the measurements being used by manufacturers before the standards were established.

GLOVES

The National Association of Leather Glove Manufacturers has copyrighted the so-called "Glovers Guild Mark" and issues it to each manufacturer signing a contract with the association for its use. This contract licenses the manufacturer to use this mark on wrappers, containers, and in the advertising of gloves made by the process known as "table cut" and states the method by which these gloves must be made. The industry recognizes four grades of leather gloves of which the table cut is the highest grade and the only one marked.

HOSIERY

No quality grading is now used in connection with merchandising hosiery on the retail market. The gauge is marked on some hose. A Commercial Standard has been established by the industry and published by the United States Bureau of Standards which relates to length of hose (*109*).

KNIT UNDERWEAR

As a result of a trade practice conference of the knit-underwear industry held under the auspices of the Federal Trade Commission in 1928, the Commission published the rule that (1) "the word 'wool' shall not be used in any way in the labeling, advertising, merchandising, and selling of knit underwear unless the wool content thereof is distributed throughout the body fabric", and (2) "That if mention of fiber content of trimmings, findings, and adornments is made, then it shall be accurately stated as applying to such trimmings, bindings, and adornments" (*116, p. 23*).

A similar conference held in 1930, established the rule that "the word 'wool' shall not be used in any way in the labeling, advertising, merchandising, or selling of knit underwear unless the percentage by weight of wool contained in the garment is stated" (*116, p. 23*).

TEXTILE FABRICS

COTTON FABRICS

Few standards or grades exist to assist the purchaser of cotton goods. The United States Department of Agriculture has established standards which are widely used in the purchase of raw cotton, but these are of no direct value to the ultimate purchaser of the fabrics (*61*).

Many cotton fabrics carry labels guaranteeing color fastness. The Nafal label (*41*) issued by the National Association of Finishers of Textile Fabrics specifies that the fabric has been tested and found to conform to standards for fastness to light and washing established by the association. The system provides for the testing of fabric samples by a commercial testing laboratory and the licensing of manufacturers to use the label.

A textile-shrinkage conference organized by the textile section of the New York Board of Trade [12] has adopted standard specifications for the shrinkage of woven cottons. Under these standards, cotton yardage would be labeled with grade symbols indicating that they would not shrink more than the maximum amount specified for each grade. The American Standards Association has been petitioned to make this an American Standard.

A simplified practice recommendation of the Bureau of Standards gives recommended widths and weights for cotton duck (*80*), and for sizes of fast-selvage terry towels (*98*).

SHEETS AND PILLOWCASES

Efforts have been made from time to time by various consumer groups to persuade manufacturers to sell sheets and pillowcases by grade or to provide labels giving the thread count, breaking strength, percentage of sizing, weight, and size of the sheet and designating whether it is a "first" or a "second." As stated by Copeland and Learned (*30, p. 9*) in a report on present practices in the merchandising of cotton textiles:

> Consumers may be conscious of the difference between the fine-count sheets and the coarser grades but many do not know about the large number of quality

[12] TEXTILE SHRINKAGE CONFERENCE, NEW YORK BOARD OF TRADE. PROPOSED STANDARD SPECIFICATIONS FOR SHRINKAGE OF WOVEN COTTONS. Adopted on Oct. 26, 1933, by the Textile Shrinkage Conference, a committee organized by the Textile Section of the New York Board of Trade. 2 pp. [1933] [Mimeographed.]

grades actually in the market and retail merchants do not inform them. In trying to meet price competition one with another, retailers fail even to promote the differences in various competing brands of sheets. They do not provide their salespeople with the basic information on which an intelligent selling campaign may be waged. The mills, furthermore, do not press this consumer and dealer education so far as might be practicable.

Some mail-order houses are now publishing in their catalogs a few of these facts concerning the sheets they sell. Few sheets sold in department stores are labeled with any pertinent facts concerning their construction, except the size, width, and torn length. Occasionally a label gives the thread count. Many terms used on sheet labels, such as "pure finish", "firsts", and "percale" are not strictly defined and are used by different members of the industry to mean different things (*52*).

TENTS, TARPAULINS, AND COVERS

The practice of using indefinite and misleading markings and descriptions on "waterproof-treated" tents, tarpaulins, and covers led the industry to set up a definite standard of marking these with their grey (unfinished) goods weight and the commercial type of fabric represented. Definitions for these types of fabrics such as "army duck", and "osnaburg", were also established. This recommendation was issued by the United States Bureau of Standards in 1931 as a Commercial Standard (*97*).

SILK FABRICS

Rules of fair competition regarding the labeling of silks were adopted by the silk industry and accepted by the Federal Trade Commission in 1932 (*116*). These provide that any fabric containing more than 10 percent of substances other than silk (except black, which shall not exceed 15 percent) shall not be designated as silk unless the word "weighted" is also used and shall not be designated "pure dye." Members of the International Silk Guild, Inc., have recently adopted a practice of labeling all silks "Pure Silk" when they are pure-dye silks which do not contain any tin weighting in conformity with the ruling of the Commission. For weighted silks, the official definition and description used by the guild is "Pure Silk, Weighted." Labels and tags using these phrases have been released to manufacturers of all-silk fabrics and all-silk ready-to-wear merchandise (*58*).

WOOL FABRICS

No grades or standard labeling practices of direct use to the consumer exist in the wool industry. Many attempts have been made to pass State and Federal statutes requiring the labeling of mixed fabrics with their wool content. Most of the bills introduced have related to the labeling of fabrics containing reworked wool. No Federal statute of this kind has been passed.

The United States Department of Agriculture has established standards for the grading of wool and wool top, based on the diameter of the fiber (*66*). Since these apply to raw wool and wool during the process of manufacture, they cannot be used by consumers in purchasing wool fabrics.

BED BLANKETS

Blankets are not sold by grade, and most of the labels found on them in the retail market give very little information. Twelve sizes of bed blankets recommended by manufacturers, distributors, and users at conferences held under the auspices of the Bureau of Standards were published as a simplified practice recommendation of the Bureau in 1924 (*79*). This reduced the number of sizes on the retail market.

In 1931 the National Retail Dry Goods Association requested the cooperation of the Bureau of Standards in the establishment of standards for labeling wool and part-wool blankets. This resulted in the adoption of a Commercial Standard containing the following agreement:

> No finished blanket containing less than 5 percent wool shall carry the word "wool" in any form. Blankets labeled with the word "Wool" in any form and containing—(a) Between 5 and 25 percent wool shall be labeled "Part wool not less than 5 percent wool." (b) More than 25 percent wool shall be labeled with the guaranteed (minimum) wool content in percentage. (c) Above 98 percent wool shall be labeled "All wool" (*104, p. 1*).

HOUSEHOLD EQUIPMENT AND FURNISHINGS

BEDSTEADS, SPRINGS, MATTRESSES, AND PILLOWS

In an effort to reduce the number of unnecessary sizes of bedsteads on the market and to insure that mattresses and springs will fit the beds, a simplified practice recommendation (*105*) was adopted in 1932 specifying four sizes each of straight-foot wood beds, straight-foot metal beds, and low-foot beds and sizes for springs and mattresses to fit them.

The labeling of all kinds of filled bedding and the conditions under which various types can be sold are regulated by State statutes. Some statutes require that every piece of filled bedding, such as mattresses, pillows, and studio couches, bear a label stating whether the filling is new or old, the kind and quality of filling, and the name of the manufacturer.

A trade practice rule of the feather and down industry contains the following:

> Rule A. To prevent confusion in the industry and as a protection to the customer, when the size of a pillow is stated on the label, the size so stated shall be the finished size and not the cut size (*116, p. 128*).

BROOMS AND MOPSTICKS

Quality standards and size standards for three grades of household brooms, Supergrade, Fancy grade, and Service grade, and for warehouse and industrial brooms have been established by the Broom Institute, Inc. (*51*). This standard has been certified by the National Standards Council, Inc., and brooms labeled with the standards carry a circular paper label bearing the certification of the council.

A Commercial Standard for mopsticks was adopted under the auspices of the Bureau of Standards in.1930 (*90*). Detailed requirements were worked out for domestic-size and janitor-size mopsticks.

GAS EQUIPMENT

All gas-burning appliances (*14*) tested and approved by the American Gas Association are labeled with the laboratory's "approval seal"

which carries the name of the association and states that the appliance fulfills national safety requirements. The standards relate chiefly to safety, construction, and performance (*4, 5, 6, 7, 8, 9, 10, 11, 12*).

Fundamentally this seal is a guarantee that appliances to which it is attached comply with national basic requirements for safety. It also insures that they contain the necessary features of design and construction essential to safety and that the appliance possesses an acceptable operating efficiency. It is in no sense a symbol of quality, however, beyond being *prima facie* evidence of the appliance's compliance with the approval requirements of the American Gas Association (*29*)

MIRRORS

A Commercial Standard accepted by the mirror industry and published by the United States Bureau of Standards in 1930, establishes five grades of mirrors designated as AA, A, No. 1, No. 2, and No. 3 qualities, based on the presence of certain defects which may be found in the glass. For the guidance of the consumer, each mirror may be, but does not have to be, labeled with these grade designations. The specifications for each grade of mirror and definitions of the terms used by the industry to describe defects are given in full in the published standard (*99*).

PLUMBING AND BOILERS

A Commercial Standard (*86*) adopted by manufacturers, distributors, and users sets up the nomenclature, definitions, grading rules, types, sizes, and dimensions of porcelain (all clay) plumbing fixtures.

Grading and labeling rules, standard types and sizes of different articles, and definitions of terms relating to articles, parts, defects, and finishes of vitreous-china plumbing fixtures are recommended in a Commercial Standard (*92*) of the Bureau of Standards.

In 1931 a Commercial Standard for colors for sanitary ware (*100*) was approved at a general conference of manufacturers, distributors, and users. The six colors recommended are green, orchid, ivory, blue, light brown, and black.

The National Board of Boiler and Pressure-Vessel Inspectors have adopted the American Society of Mechanical Engineers' boiler and unfired pressure-vessel codes as standard. They have also adopted uniform inspection rules governing shop inspection and a uniform standard stamping. Boilers and pressure vessels that are constructed in accordance with the American Society of Mechanical Engineers' Code, and inspected by a qualified national board inspector are stamped upon completion with the words "Nat'l. Board."

Standard dimensions and capacities of hot water storage tanks are included in a simplified practice recommendation agreed upon in 1925. Working pressures, classification, and marking of such tanks are also specified in this recommendation (*81*).

REFRIGERATORS

Conferences held under the auspices of the American Standards Association in 1928 and 1929 agreed upon quality specifications desirable for household refrigerators (*53*) and recommended that information concerning certain features be given on the refrigerator name plates. Few refrigerators carry such information or any other quality designation at the present time. A simplified practice recommendation (*91*) accepted by the industry and published by the United States Department of Commerce recommends certain capacities of ice com-

partments and minimum dimensions for door openings and compartment depths of household ice refrigerators. Closely related to this is the simplified practice recommendation specifying maximum dimensions of ice cakes of various weights (*84*).

WALL PAPER

The wall-paper industry has adopted a Commercial Standard (*88*) for wall paper which governs the width of raw stock, the width of printed pattern, length of commercial single roll, and coverage surface. It also establishes a minimum quality based on weight, color fastness, grounding, printing, and raw stocks. The National Wall Paper Wholesalers' Association has adopted a "roll of honor" insignia which can be used by members of the association on wall papers conforming to published specifications of the association and the minimum general requirements of the Commercial Standard. This insignia appears as a fly-leaf insert sheet placed in the sample book containing such wall papers, and on the back of samples conforming to the prescribed specifications, and also as a gummed label on the roll of such wall paper.

SERVICE INDUSTRIES

DRYCLEANING

The only drycleaning solvent for which standards are available is so-called "Stoddard solvent." The standard was prepared primarily for the drycleaning industry but the solvent is sold to some extent for home use. The Commercial Standard agreed upon by a conference of manufacturers, distributors, and users in 1927, sets specifications for such properties as appearance, color, odor, flash point, corrosion test, distillation range, and acidity (*87*).

A trade practice rule adopted by the industry for the District of Columbia and vicinity and approved and published by the Federal Trade Commission March 24, 1933, includes recommended minimum standards for drycleaning as follows: (*116, p. 156*).

Cleaning: That an article or articles represented as dry cleaned shall not, if rerinsed in water-white solvent (1 gallon to 1 pound of garment-weight), show sufficient soil residue to darken the dry solvent below 15 Saybolt chronometer.

Finishing: That any article or articles represented as finished dry cleaning shall be free from solvent or chemical odors and restored to original hue and shape, with all spots and/or stains removed, except those chemically determined as insoluble without injury to the color or fabric, with the original shape, dimensions, and contour of the article restored as nearly as possible, and with no damage to fabric finish: *Provided*, That damage resulting from and traceable to the metal weighting of silk, carbonization, or other defects of material shall not be considered faulty or defective dry cleaning.

Similar provisions are contained in rules adopted by the cleaning and dyeing industry of Pennsylvania and adjacent territory and approved by the Commission in 1934.[13]

LAUNDERING

No national standards or grading systems are now in use which define or designate the quality of service sold the public under the name "laundering." Efforts have been made in some localities to set up quality standards based on a minimum grayness of fabrics washed by the laundry process and a minimum decrease in tensile

[13] UNITED STATES FEDERAL TRADE COMMISSION. CLEANING AND DYEING INDUSTRY (PENNSYLVANIA AND ADJOINING TERRITORY). Statement by the Commission issued Jan. 11, 1934. 4 pp. [Mimeographed.]

(breaking) strength of the fabric brought about by the bleaching agents used. So-called "certification plans" have been started in New Jersey and in Pennsylvania under which laundries certified by the respective State laundry-owners associations are permitted to display special insignia adopted for the purpose.

For example, in Pennsylvania—

> The certification of a laundry is passed upon by a Commission of Pennsylvania Laundryowners elected by members of the Pennsylvania Laundryowners Association. The issuance of certification is based on inspection of the plant by a chemist and the examination of test bundles run through the plants with the regular customers' work. To obtain the certificate, a plant must attain a certain average rating on both of these, and to continue to hold it must maintain these ratings both on frequent inspections and on quarterly test bundles (*46*).

The bundles are tested in the laboratory for such qualities as loss in breaking strength during the laundering and amount of grayness of the fabrics. The testing and technical control involved in this work is done at Pennsylvania State College in cooperation with the State laundry-owners associations.

MISCELLANEOUS

CEMENT

Portland cement can be purchased on the basis of standard specifications established by the American Society for Testing Materials and approved as an American Standard by the American Standards Association. These cover chemical and physical properties, packing, marking, storage, inspection, rejection, and methods of testing (*23*).

COAL

Coal is classified by the Geological Survey, United States Department of the Interior, by rank in descending order, into anthracite, semianthracite, semibituminous, bituminous, subbituminous, and lignite. These terms are defined in a paper by Campbell (*27*).

Trade practice rules were adopted by the Bituminous Coal Industry of the State of Utah in 1929 and approved and republished by the Federal Trade Commission August 31, 1931 (*116, p. 77*). They contain the following clause:

> The industry of Utah hereby records its approval of the following terms as distinguishing and identifying sizes for domestic trade: Dust: Coal passing through ¾-inch screen. Screened slack: Coal passing over ¾-inch screen and through 1⅝-inch screen. And the following all over and through round-hole shaker screens: Slack: Through 1⅝-inch screen. Nut: Over 1⅝-inch screen and through 3-inch screen. Domestic lump: Over 3-inch screen. Stove or cobble or California lump: Over 3-inch screen and through 8-inch screen. Lump: Over 8-inch screen. Mine run: Unscreened coal.

DRUGS

The Pharmacopoeia of the United States (*117*) provides standards for drugs and medicines of therapeutic value and gives tests for identifying them as well as determining their quality and purity. It is prepared and published by an incorporated organization known as the "United States Pharmacopoeial Convention", which is composed of a board of trustees and delegates from the medical departments of the United States Army, United States Navy, United States Marine Hospital Service, medical, pharmaceutical and chemical societies, and

colleges and universities of medicine and pharmacy. Revisions are published every 10 years.

The National Formulary (*21*) gives definite formulas for preparations sufficiently used in medical practice in the United States for which formulas are not given in the Pharmacopoeia of the United States and establishes standards and tests for the identity, quality, and purity of the essential ingredients in these formulas. It is prepared by a committee of 15 members appointed by the council of the American Pharmaceutical Association and is revised every 10 years. The Pharmacopoeia is a standard of therapeutic drugs and medicines, whereas the National Formulary sets up a standard for pharmaceutical formulas in use by physicians. The Federal Food and Drugs Act makes the standards for drugs prescribed by the United States Pharmacopoeia and the National Formulary the legal standards for these products in the United States.

FUNERAL MERCHANDISE

According to the secretary of the National Funeral Directors Association:

> All leading manufacturers of caskets place in a conspicuous spot thereon a label which states the material out of which the casket is constructed. In addition thereto many manufacturers issue a detailed description of the coverings and interiors of these caskets. . . . Manufacturers of metal vaults place labels thereon stating the gauge metal of which the vault is constructed.[14]

FUR

A trade practice conference of the fur industry adopted rules regarding the naming of furs which were approved and published by the Federal Trade Commission in 1928. They are as follows:

> RULE 1. In order to describe a fur, in every case the correct name of the fur must be the last word of the description, and if any dye or blend is used simulating another fur, the word "dyed" or "blended" must be inserted between the name signifying the fur that is simulated and the true name of the fur, as: "Seal-dyed muskrat", or "mink-dyed marmot."
>
> RULE 2. All furs shaded, blended, tipped, dyed, or pointed must be described as such, as: "Black-dyed fox", or "pointed fox."
>
> RULE 3. Where the name of any country or section is used, it shall be the actual country of the origin of the fur, as "American opossum." Where the name of a country or place is used to designate a color, the fact shall be indicated, as: "Sitka-dyed fox" (*116, p. 10*).

GOLD ARTICLES, OTHER THAN WATCHCASES

A Commercial Standard (*112*) recently issued establishes rules for the marking of gold-filled and rolled-gold-plate articles other than watchcases. According to this agreement, the quality of such articles is to be designated by and to bear marks which state in terms of fractions and karats the correct proportion of the weight of the alloyed gold to the weight of the entire metal in the article and the actual karat fineness of the entire gold covering. A minimum gold content is established for articles labeled "Gold Filled" and the mark "Rolled Gold Plate", if used, must be preceded by the fraction and the fineness designation.

LEATHER

The Tanners' Council of America sponsors an arrangement whereby luggage and leather-goods manufacturers may sign an agreement

[14] Private communication Jan. 15, 1934. Harry J. Gilligan, Secretary, National Funeral Directors Association.

authorizing them to attach a council label to their products designating the leather used as Top-Grain Cowhide, Split Cowhide, Top-Grain Seal, or Split Seal. These labels also carry the name of the council and the license number assigned the manufacturer by the council. The plan is intended to eliminate the abuse of stamping "Genuine Cowhide" and "Genuine Seal" on both top-grain and split leathers.

A standard of thickness for bag, case, and strap leather has been adopted by the industry and published by the Bureau of Standards as a Commercial Standard (*94*).

LUMBER

Standards for lumber sizes and grades have been established by the lumber industry in cooperation with the United States Department of Commerce, assisted by the United States Department of Agriculture. The grading rules (*26*) of the various lumber-manufacturers' associations under which lumber is purchased conform closely to these standards (*85*). In order to certify to the purchaser that the lumber he receives is of the kind and quality specified, a number of these associations have established the practice of association grade-marking and trade-marking, under which procedure each piece of lumber is marked to show the species, quality, and the manufacturer, in addition to bearing the official association grade mark (*50, 113*). The practice of grade-marking is also applied to maple (*47*) and oak flooring.

Standards for western red cedar, tidewater red cypress, and California redwood shingles have been established as Commercial Standards (*111*) published by the United States Bureau of Standards. Each bundle of shingles manufactured in accordance with these standards is labeled to show the kind of wood and that they conform to the recommended standard.

The following are the various lumber-manufacturers' associations whose members furnish officially graded and trade-marked lumber: California Redwood Association (California redwood); National Hardwood Lumber Association (*49*); Northern Hemlock and Hardwood Manufacturers Association, Oshkosh, Wis., (eastern hemlock and tamarack); Red Cedar Shingle Bureau, Seattle, Wash., (red cedar shingles); Southern Cypress Manufacturers Association, Jacksonville, Fla., (tidewater red cypress (*56*)); Southern Pine Association, New Orleans, La., (longleaf southern pine and shortleaf southern pine (*57*)); West Coast Lumbermen's Association, Seattle, Wash., (Douglas fir, Sitka spruce, west coast hemlock, and western red cedar (*119*)); Western Pine Association, Portland, Oreg., (ponderosa pine, sugar pine, Idaho white pine, western larch, Douglas fir, white fir, Engelmann spruce, incense cedar, and western red cedar); Maple Flooring Manufacturers Association (maple, birch, and beech flooring); and National Oak Flooring Manufacturers Association (oak flooring).

OILS (FUEL AND LUBRICATING)

A joint conference of representative refiners, distributors, and consumers of fuel oil and manufacturers of oil burners adopted a recommended standard for domestic and industrial fuel oils in 1929 which was revised in 1932. The revised standard was also approved by a committee of the American Society for Testing Materials and later published as a Commercial Standard (*106*). It gives specifications

covering six grades of fuel oil for various types of fuel-oil-burning equipment and recommended methods of test.

The Society of Automotive Engineers has established "recommended practices" which designate the S.A.E. viscosity numbers for crankcase lubricating oil and transmission and rear-axle lubricants (*55, p. 433*). The S.A.E. viscosity number of a particular lubricant is stamped on the container. The numbers constitute a classification of crankcase lubricating oils in terms of viscosity only, and of transmission and rear-axle lubricants in terms of viscosity and of consistency at low temperatures only. Other factors of quality or character are not considered. In many cases these numbers have supplanted such less specific terms as "light", "medium", and "heavy".

A method of rating fuels for detonation has also been established as an S.A.E. "recommended practice" (*55, p. 435*). By this method, gasoline knock-testing results are expressed in terms of a scale of octane numbers which has been adopted by the society.

PAINT

See page 3.

WATCHCASES

The Federal Trade Commission has approved and published trade practice rules adopted by the watchcase industry which includes official standards for cases entitled to bear a 25-year guarantee and a 20-year guarantee (*116, pp. 1, 41*).

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